

ABSTRACT OF THE DISCLOSURE

A method for selectively etching metal and metal-based films during integrated circuit fabrication. For one embodiment known chelators, which may be in relatively high concentration are used to etch metal films. In various alternative embodiments new chelators, developed by tailoring known chelators to target specific metals, are used to etch metal films. A metallic film is deposited on a substrate, the metallic film containing one or more specific metals. A layer of photoresist is deposited on the metallic film and patterned to mask a desired portion of the metallic film while exposing an undesired portion of the metallic film. One or more chelating agents are selected based upon the one or more specific metals contained in the metallic film and used to remove the undesired portion of the metallic film.